North Carolina Department of Environment and Natural Resources



## **Technical Bulletin for N.C. General Stormwater** Permit NCG140000

Technical Bulletin for NCG140000—Ready-Mixed Concrete General Permit

Revised 11/16/2011

### What activities are covered by this general permit?

### NCG140000 coverage includes the discharge of:

- √ Stormwater point source discharges from ready-mixed concrete (SIC code ) 3273) and like activities, including on-site vehicle maintenance areas.
- ✓ Specific process wastewater discharges (wastewater associated with vehicle and equipment cleaning, raw material stockpiles, and/or mixing drum cleanout).

#### NCG140000 excludes coverage of:

- Discharges of wastewater not specifically designated in this permit
- Disposal of any concrete directly into stormwater conveyances, storm sewer outfalls, wetlands, and/or into any waters of the state.

### What are key stormwater requirements?

- ✓ Perform semi-annual Analytical & Qualitative Stormwater monitoring during a measurable storm event (Part IV, Sections A and C). See the reverse side of this sheet for more information on the measurable storm event.
- ✓ Perform semi-annual analytical monitoring for vehicle maintenance areas, if present (Part IV, Section B).
- ✓ Develop & implement a Stormwater Pollution Prevention Plan (SPPP) (Part III, Section A).
- ✓ Provide Secondary Containment for bulk storage of liquid materials (Part III, Section A).

### What are key wastewater requirements?

- ✓ Perform Quarterly Analytical Monitoring for wastewater discharges associated with vehicle and equipment cleaning, raw material stockpiles, and/or mixing drum cleanout, and report results to DWQ (Part IV, Section D).
- ✓ Maintain a list of detergents, additives, polymers, brighteners and any other solvent, cleaning agents, or like chemicals used on site in the industrial process. Additionally, if phosphate-containing detergents are used on site, a feasibility study must be conducted to show the viability of using phosphate-free detergents (Part II, Section B)
- ✓ Wastewater discharges must meet the requirements of effluent limitations in Part IV, Section D of this permit. An exceedence of any of these limitations will result in a violation of the permit conditions.

### What has changed since the last renewal?

#### Stormwater-specific changes:

- The Stormwater Pollution Prevention Plan has been revised to reflect updated wording and specific concerns relating to ready-mixed concrete industrial activities.
- The monitoring scheme has been changed to semi-annual 7Q10-based limits for PNA waters have been added. monitoring (modified from annual monitoring in years one and five).
- Cut-off concentrations have been removed and replaced with Benchmark action levels. When an analytical Bench- • Specific new detergent language has been added. mark is exceeded, a Tiered Response applies.
- "Measurable Storm Event" has replaced "Representative Storm Event". See reverse side for more information.
- Failure to monitor stormwater immediately institutes a minimum 6-month period of monthly monitoring.
- Stormwater discharges shall be monitored from vehicle maintenance areas for Total Petroleum Hydrocarbons (TPH) rather than Oil & Grease (O&G).
- Qualitative monitoring is tied to the sampling event of the stormwater analytical sampling and shall be performed whenever analytical monitoring is performed.

### Wastewater-specific changes:

- WW monitoring has been changed to quarterly.
- TSS limits were revised for receiving waters classified as PNA, Trout, and HQW per 15A NCAC 02B .0224.
- TPH requirements have been added when wastewater commingles with vehicle maintenance area (VMA) stormwater.
- All permittees must monitor wastewater discharges to surface waters.
- Failure to monitor wastewater quarterly per permit terms immediately institutes monthly monitoring for a minimum of six months.
- Ready-mixed plants with closed loop-recycle systems or other wastewater treatment facilities that do not discharge to surface waters must contact DWQ's Aquifer Protection Section Land Application Unit to obtain any necessary permits.

### **Frequently Asked Questions**

#### Do I have to monitor all outfalls?

Yes. However, you may request Representative Outfall Status (ROS) for stormwater-only outfalls. If approved, this status allows analytical monitoring at fewer outfalls. To request ROS, submit a ROS Request Form SWU-ROS (from our website) to your nearest DWQ Regional Office.

#### Where & when do I send DMRs?

Permittees must send all monitoring reports to DWQ Central Files. These reports shall be submitted on DMR forms provide by the Director, no later than 30 days from the date the facility receives the sampling results.

# What if I don't address qualitative monitoring problems?

If ready-mixed concrete facilities do not respond to problems seen in visual monitoring, DWQ may require that sites change the monitoring frequency, apply for an individual permit, implement instream monitoring, install or modify structural stormwater controls, or implement other controls.

# Can I take more samples than is required by the permit?

Yes. This permit does not bar the permittee from taking multiple samples at any point while under permit coverage. The permittee may find re-sampling useful to quickly identify attempts to correct discharge problems.

### What if I forget to monitor?

Ready-mixed facilities that do not monitor per permit conditions, shall monitor monthly for six months, at a minimum. The Regional Office has flexibility to extend this time period per their judgment.

# What is a "Measurable Storm Event", and do I have to wait 72 hours between storm events?

A measurable storm event is an event that results in an **actual** discharge from the outfall. The previous measurable storm event must have been at least 72 hours prior. The 72-hour storm interval does not apply if the permittee is able to

document that a shorter interval is typical for local storm events during the sampling period and obtains written approval from the DWQ Regional Office. The permittee can submit data from a reputable third party such as the State Climate Office of North Carolina. This data shall be submitted to the DWQ Regional Office with a written request.

# Is it a requirement to design a closed-loop recycle system (CLRS) for our site?

Every site is different, but it is not necessary to design and operate a CLRS for many ready-mixed facilities. If site-specific conditions prevent discharge to surface waters, or make a non-discharge treatment option (such as CLRS) more feasible, you must contact DWQ's Land Application Unit to obtain any necessary permits or to determine if it can qualify as a "deemed permitted" system under Non-Discharge Rules.

#### Do I now need an ATC?

No, not any longer. Per North Carolina Session Law 2011-394, industrial wastewater permit dischargers with an NPDES permit no longer need additional approval "... to enter into a contract for the construction, installation, or alteration of any treatment works or disposal system or to construct, install, or alter any treatment works or disposal system within the State". However, wastewater discharges must still meet effluent limitations in Part IV, Section D of this permit. An exceedence of any of these limitations is a violation of permit conditions.

### Who can help me?



Division of Water Quality (DWQ)

| Asheville Office    | (828) 296-4500 |
|---------------------|----------------|
| Fayetteville Office | (910) 433-3300 |
| Mooresville Office  | (704) 663-1699 |
| Raleigh Office      | (919) 791-4200 |

# Must a PE sign-off on my new or expanded treatment facility?

It is no longer a requirement of this *permit application* for a Professional Engineer to sign off on plans and calculations. *However* it may be a requirement of other North Carolina regulations, such as those of the N.C. Board of Examiners for Engineers and Surveyors.

# Why did you replace Oil & Grease with TPH in VM areas?

TPH is specific for chemicals derived from crude oil, so it is a better parameter for vehicle maintenance areas. The TPH method we are specifying for NCG14 is EPA 1664A (SGT-HEM). It is important to note that DWQ is not specifying the more expensive Gas Chromatograph (GC) TPH method. DWQ found lab costs for EPA 1664A (SGT-HEM) to be comparable to current O&G test costs. Note: A lower benchmark applies for TPH: 15 mg/l (not 30 mg/l).

#### What about the Coastal Rules?

New or expanding ready-mixed concrete facilities in the 20 coastal counties with >10,000 square feet of built upon area may also need to obtain a State Stormwater Permit. If you are located in one of the 20 coastal counties, check with your nearest DWQ Regional Office.

# What if I can't sample because of bad weather?

Adverse weather is dangerous or creates inaccessibility for personnel. Documentation of adverse weather and the reasons for not sampling must be included with your SPPP records. A substitute sample must be taken during the next qualifying storm event.

### Can I use PAMS at my site?

Yes, flocculants may be used. A list of products can be found on our website.

| Washington Office    | (252) 946-6481 |
|----------------------|----------------|
| Wilmington Office    | (910) 796-7215 |
| Winston-Salem Office | (336) 771-5000 |
| Central Office       | (919) 807-6300 |

DWQ Stormwater Permitting Unit: http://portal.ncdenr.org/web/wq/ws/su Impaired Waters & TMDL Lists: http://portal.ncdenr.org/web/wq/ps/mtu